

APPLYING THE PHILLIPS EVALUATION MODEL TO THE BALANCED SCORECARD: MEASURING AN ORGANIZATION'S LEARNING & GROWTH (INNOVATION) PERSPECTIVE

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ABSTRACT

This paper advances a more standardized set of metrics for adopting and implementing a balanced scorecard approach to planning and control via the Phillips Evaluation Model. The Phillips process provides a consistent and deliberate approach to evaluation of learning and growth from an organizational perspective. The advantage of the model is not only consistency in implementation and evaluation of the balanced scorecard but provides managers multiple levels of data on which to base an assessment and improve learning, growth and overall organizational performance.

INTRODUCTION AND PURPOSE

The Balanced Scorecard (BSC) Approach is a performance metric commonly used in strategic management initiatives. Kaplan & Norton (1992) developed the Balanced Scorecard (BSC) Approach as an effort to expand beyond traditional measurement systems, to focus more on organizational strategy and vision. Traditional metric systems, which have a bias toward control of behavior, relied quite heavily on financial outcomes only. Because of that, Kaplan & Norton (1992) sought to balance the financial metrics with others that they identified as critical to an organization's success. The BSC uses the traditional financial perspective as the foundation, and links three additional perspectives (customer, internal, and innovation and learning) in order to focus on a small number of measures that are the most critical to an organization.

The balanced scorecard has been used across both public and private organizations, and in several different industries. Jackson (2020) notes examples from the automotive industry, banking, healthcare, manufacturing, energy, technology, and various levels of government. The purpose of the scorecard is not to create a strategy for a company, but rather to help facilitate goal-setting and associated metrics along each of the four perspectives. Lucco (2020) points out that an effective balanced scorecard must have objectives and measures for each, so that the

organization can know the extent to which objectives are met. He includes example objectives for airline companies, banks and others that are wide ranging – such as increasing shareholder value, having low ticket prices, creating a fun experience for employees, expanding sources of revenue, having a robust plan for crisis recovery, etc.

Chavan (2009) asserts that the balanced scorecard must change and evolve as an organization and its culture changes, and the needs of individual organizations dictate how individualized a balanced scorecard should be for a company. Norreklit (2003) shows that the BSC is open to interpretation, intuition and emotions. These characteristics create weaknesses for the BSC, as well as its application within organizations. Additionally, the uncertainty of the content of the balanced scorecard is not only a challenge for practitioners, but also for researchers (Norreklit & Mitchell, 2014). The strengths of the balanced scorecard, which focus on its flexibility to specific company issues, conditions and problems also presents some of the key weaknesses. These include not having a concrete set of measures, metrics or comparable data as a result of a well-maintained BSC.

This paper proposes a fixed set of metrics (according to the Phillips/Kirkpatrick training evaluation models) in order to have a defined methodology for assessing the effectiveness of learning and growth objectives within the balanced scorecard approach. Applying a fixed, but still individualized set of consistent measures, would help to correct some of the criticisms associated with the balanced scorecard approach.

BACKGROUND OF THE BALANCED SCORECARD APPROACH

Kaplan & Norton (1996) argued that when companies build a scorecard, it enables them to link financial budgets with strategic goals. The BSC uses the traditional financial perspective as the foundation, and links three additional perspectives (customer, internal, and innovation and learning) in order to of the organization together to focus on a small number of measures that are the most critical to an organization. The fourth – innovation and learning – is sometimes referred to as “learning and growth.” Those four areas are based on four questions:

1. How do we look to our shareholders? (Financial perspective)
2. How do customers see us? (Customer perspective)
3. What must we excel at? (Internal perspective)
4. Can we continue to improve and create value? (Innovation/Learning perspective)

(Willyerd, 1997).

Quesado, Guzman & Rodrigues (2017) identified a series of advantages and contributions that have been derived from the implementation of the balanced scorecard approach. They argued that the BSC can serve as a cornerstone of an organization's management system by clarifying and updating an organization's strategy and vision (Lueg, 2015), translating the mission and strategy of an organization into concrete actions and a set of indicators (Zizlavsky, 2014), facilitate internal communication of strategy and vision (Hoque, 2014), linking objectives to goals and budgeting actions (Chavan, 2009), allowing teams to focus on strategic priorities (Niven, 2003) as well as aligning the initiatives that lead to strategic objectives (Otley, 1999).

Others have noted significant contributions of the BSC model, including the flexibility and adaptability of the model to different types of organizations, the specification of critical success factors and their relationships within an organization, contributing to learning at the level of activities and processes, and a cause and effect analysis, linking activities to objectives to improve appropriate resources allocation, and linking perceived organizational support to training (De Geuser, Mooraj & Oyon, 2009; Michalska, 2005; Ritter, 2003; Kanji & Sá, 2001; Epstein & Manzoni, 1997; McKnight, 2005, 2007 & 2008).

Even with the significant contributions and noted advantages of the balanced scorecard, a series of problems and criticisms have been noted. The following section outlines some of the documented issues with the balanced scorecard approach.

CRITICISMS OF THE BALANCED SCORECARD

The following sections attempt to organize and convey criticisms of the balanced scorecard approach by the respective components of a balanced scorecard. These will include a review of common criticisms of the financial perspective, customer perspective, internal process perspective, and finally the learning and growth perspective.

Financial Perspective Criticisms

While financial measures are important, they must be supplemented with other indicators that predict financial success (Domanovic, Bogićević, & Savovic, 2012). According to Maciariello & Kirby (1994), the aggregate financial measures of the accounting system are not enough to ensure goal congruence between staff decisions and actions. Norreklit, Jacobsen, and Mitchell (2008) found that the causal relationships between non-financial and financial measures are not necessarily valid. Furthermore, the BSC gives little insight into the relative importance of different measures within the model. In one way, it is often difficult to measure what the organization intends to measure (Thompson & Mathys, 2008). In another, the BSC can become a constraint which can hinder innovation and creativity (Voelpel, Leibold, Eckhoff, & Davenport 2006).

Customer Perspective Criticisms

Norreklit (2000) states the relationship between measures on the BSC is ambiguously described and the model suffers from lack of clarity. The author analyzed the relationship between customer satisfaction and good financial results. In a previous study, Reichheld and Sasser (1990) found a trend in over 100 companies that suggested a relationship between customer loyalty and satisfaction. Norreklit (2000) questions these results, due to the lack of information provided regarding the strength of the trend and whether the trend held for all customers and firms. The lack of causality between quality and financial results has previously been confirmed (Ittner & Larcker, 1998). This suggests the relationship between areas is more likely one of interdependence, rather than one of cause and effect. It is possible to conclude that the causality claimed to hold between perspectives is problematic. Therefore, the BSC makes invalid

assumptions, which may lead to the anticipation of performance indicators which are faulty, resulting in sub-optimal performance (Norreklit, 2000).

Internal Process Perspective Criticisms

It is estimated that 70% of balanced scorecard initiatives failed (Atkinson, 2006). Difficulties in the balanced scorecard stem from the implementation of certain aspects as well as in the limitations of the model (Othman, 2008). Whether or not the BSC is a valid model for obtaining promised results is worth exploring (Norreklit, 2000), because invalid assumptions in a feed-forward control system will cause anticipation of performance indicators which are faulty, resulting in dysfunctional organizational behavior and sub-optimal performance (de Haas & Kleingeld, 1999).

In addition to invalid assumptions, the BSC is criticized for being static and ignoring the external environment (Norreklit, 2003; Voelpel et al., 2006). This can be attributed to the internal focus of the BSC. Performance targets tend to be out of touch with reality due to the insulation from the changing external environment. When targets are treated as fixed, the BSC ignores activities and initiatives that goes beyond the original targets. This is seen as myopic and does not help the organization deal with changes that can affect the strategy (Othman, 2008). The BSC gurus never intended for the model to be static (Gautreau & Kleiner, 2001); however, they are not clear on how this should be done (Othman, 2008).

Learning and Growth Perspective Criticisms

Chang (2007) found that, when using a balanced scorecard, the Performance Assessment Framework was primarily used for legitimacy seeking (rather than performance improvement). Rillo (2004) notes that it is commendable that the balanced scorecard approach includes a focus on learning and growth, but finds it limiting that a traditional view of innovation is limiting. More specifically, factors associated with research and development, mobility of knowledge workers, advances in technology and information sharing and, most notably, a lack of performance measures are not sufficiently addressed in the scorecard's view of innovation. Finally, BizShifts

(2010) notes the lack of a bottom line or unified view of the balanced scorecard as a significant limitation during the implementation stage.

Another key issue with the balanced scorecard is the lack of overlap and linkages among the various perspectives. While they may be one of the implied goals of the scorecard approach, the troubles with implementation can be attributed to the lack of workable and practical linkages between various components in the model (Rillyan, GandaSatria, Raihan & Wibisono, 2016).

Using the Phillips Model for Training Evaluation as a consistent set of metrics for the learning and growth perspective that tie together the perspectives of the balanced scorecard can help to alleviate the lack of linkages and offer stability to the implantation process.

The Phillips model can be used for important accounting metrics such as the balance scorecard. The intent of the scorecard is to drive strategy for a single business unit, such as the training function. Both models will explain how they can be implemented into training strategies and programs such as the scorecard with the intent to acquire benefits. The following section outlines the (1) Kirkpatrick Model as a predecessor of the Phillips Model as well as the (2) adaptations to the model by Phillips.

KIRKPATRICK MODEL

The Kirkpatrick Model is ideally a simplistic four-level training and learning evaluation model. These levels consist of the following in order: Reaction, Learning, Behavior, Results. According to Kirkpatrick Partners (2017), the Kirkpatrick Model is the standard for evaluating training effectiveness. This specific model began in 1956 and updated in 1975 and 1993 by Donald Kirkpatrick. Kirkpatrick hoped that this model would fill the gap in the workforce and improve their practices concerning training evaluation. This training and learning evaluation model clarified if the training put into place was relevant to the company and its employees (Clark, 2015). The model includes four basic levels of evaluation, which are outlined in the following sections.

Kirkpatrick Level 1: Reaction

It is crucial to understand how employees feel about the training that has been implemented and if it was effective. Employees' reactions throughout this process are meant to boost improvements during training. Some groups of researchers, as well as Kirkpatrick, believe that this level helps assess the trainee's views and opinions and where the trainers can incorporate better satisfaction based on the trainees and overall the corporation's needs. Often employees can be asked questions to identify specific reactions during training (Mind Tools, 2019).

These questions can give a good indication based on verbal feedback and body language if changes need to be made. The presenter and training materials are usually evaluated largely to identify if they were successful. Studies developed have shown that up to 84 percent of employers evaluate reactions based on the end of survey, feedback forms, and questionnaires (Tamkin, Yarnall, & Kerrin, 2002). Other groups of researchers have found that the reaction level is not the correct approach and does not correlate with reactions and learning. Kirkpatrick argues that evaluating reactions keeps participants coming back to programs and advocating them to others (Tamkin, Yarnall, & Kerrin, 2002). It was Kirkpatrick's initial idea that this level would overall help the quality of training (Thomas, 2008).

Kirkpatrick Level 2: Learning

Kirkpatrick's second level measures the outcomes of a training program, based on learning that has occurred. The company or trainers need to set learning objectives for each training session to know exactly what they are trying to accomplish or acquire. Data is then evaluated to consider if trainees gain and even change the skills, knowledge, or attitudes. The concept is built upon the idea of demonstrable competencies (Mind Tools, 2019). To assess whether learning has occurred or increased it is important to collect data before the training occurs and after and compare. Ways to assess if learning has occurred can be through many forms, but popular forms are performance evaluations or tests, feedback, and interviews (Juoztis, 2019). It can be crucial in some organizations to test trainees using a time gap in between the training program to know if

the key objectives are remembered over the long-term, or whether refresher courses need to be offered (Hypes, 2016).

Kirkpatrick Level 3: Behavior

The third level of Kirkpatrick's model establishes if there is a relationship between training and actual use of training by studying behavior of the learner or employee (Thomas, 2008). The purpose of level three is to evaluate if employees have transferred their training into practice and actions that benefit the organization in demonstrable ways. A trainee may have a lot knowledge of a process through a training program, but it is critical that he or she use (or intend to use) what was learned. When conditions are favorable and the employer, supervisor, boss, etc., allow the knowledge or skill to be used, then a behavior change will most likely occur. A behavior change could be hindered if the learner does not have proper motivation, correct tools, or is weary of the training.

Kirkpatrick Level 4: Results

The final level of the Kirkpatrick assesses the degree to which specified outcomes are a result of the training that has been completed (Kirkpatrick Partners, 2019). The New World Kirkpatrick Model define level four as observations and measurements that indicate the degree to which specific behaviors are likely to positively impact organizational outcomes. It can be argued that this is the most important level of this model because of its tangible focus. Specific examples of results might include increased employee retention, increased production, higher morale, reduced waste, increased sales or increased customer satisfaction (MindTools, 2019).

Measurement of results might also lead to additional incurred time and, thus, costs. The allotment of time is needed to pass for results to occur and be collected (Thomas, 2008). Other factors can come into play when searching for results such as selecting the wrong indicators or delayed barriers (Hypes, 2016).

PHILLIPS MODEL

The Phillips Model is often considered an extension of Kirkpatrick's Model because it essentially adds one additional step. Jack Phillips developed the first four steps of his process very similar to Kirkpatrick. The steps consist of Reaction and Planned Action, Learning, Application and Implementation, Business Impact, and Return on Investment (ROI) (Phillips, 2003). The last step ROI is what makes this model stand out by giving critical insight. There are two other modifications of the Kirkpatrick model based on an isolation technique and intangibles that are included in the ROI process.

In Phillips' fifth step, a company can realize the costs associated with training (Hypes, 2016). According to Hypes (2016), the ROI step provides the organization with the ability to forecast costs and benefits associated with the training event before the actual training takes place. To calculate the ROI as a percent, one should first find the benefit of training minus cost of program/training divided by cost of program/training times one hundred. This step can become complicated, expensive, and need many resources so it may only be ideal to implement this into 5% or 10% of training programs implemented (Camm, 2011).

Next, isolation techniques are used as ways to keep the evaluated benefits from specific training programs separate from other motivating factors - such as bonuses or temporary seasonal effects (Bailey, 2019). Bailey (2019) points out that the model uses several techniques to isolate the business impact of training from other sources of improvement (interest rate changes, competitive environment, marketing programs, employee bonus schemes, seasonal effects that temporarily contribute to business improvements, etc.

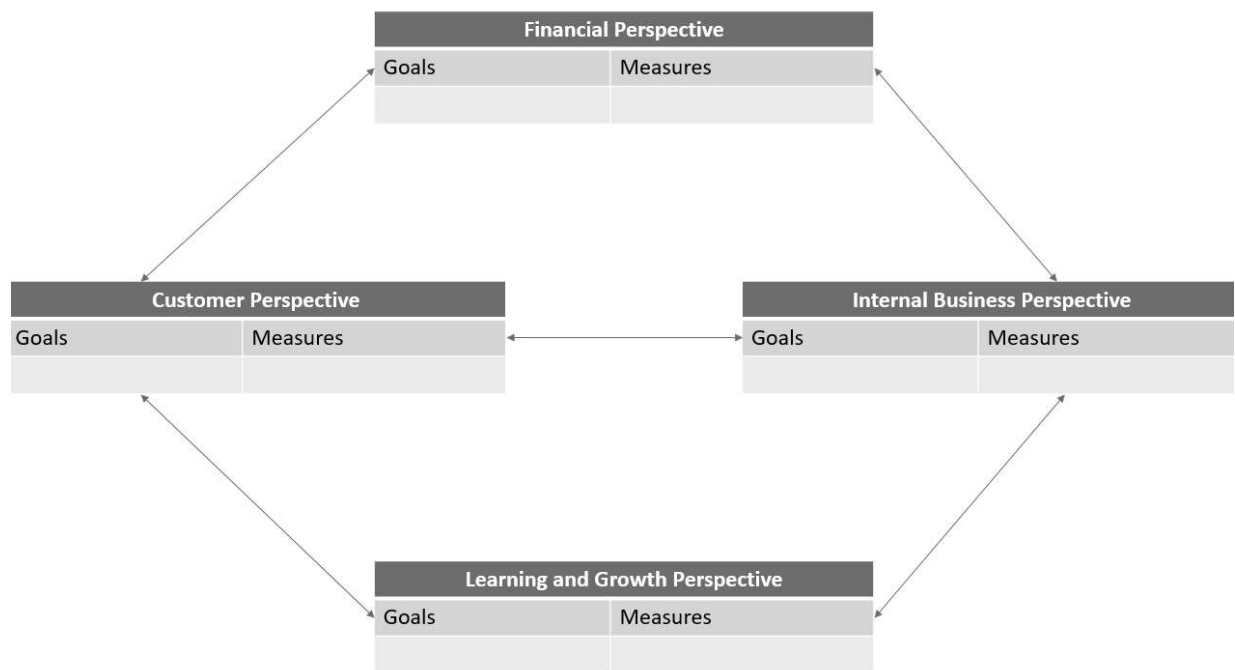
Finally, Phillips' model includes the idea of intangibles, which are defined as actions that cannot clearly be translated into financial value. Examples might include stress reduction, employee engagement, grievance reduction, improved customer satisfaction, complaint reduction, and conflict avoidance (Bailey, 2019). These intangibles can include non-monetary benefits that can

be even more important than the monetary and more tangible benefits. As such, they should be evaluated and included in a formal way (Phillips, 2003).

INTEGRATING THE PHILLIPS MODEL INTO THE BALANCED SCORECARD FRAMEWORK

A balanced scorecard uses four perspectives to set goals and measure performance for an organization (Kaplan & Norton, 1992). Using relationships among the perspectives, the idea is for companies to have a balanced approach that looks at more than financial measures of success. This paper advocates for a standardization of the innovation and learning measures as a means of addressing some of the more common criticisms of the balanced scorecard approach. Figure 1, below, recaptures the balanced scorecard as described by Kaplan & Norton (1992).

Figure 1: The Balanced Scorecard as Originally Proposed

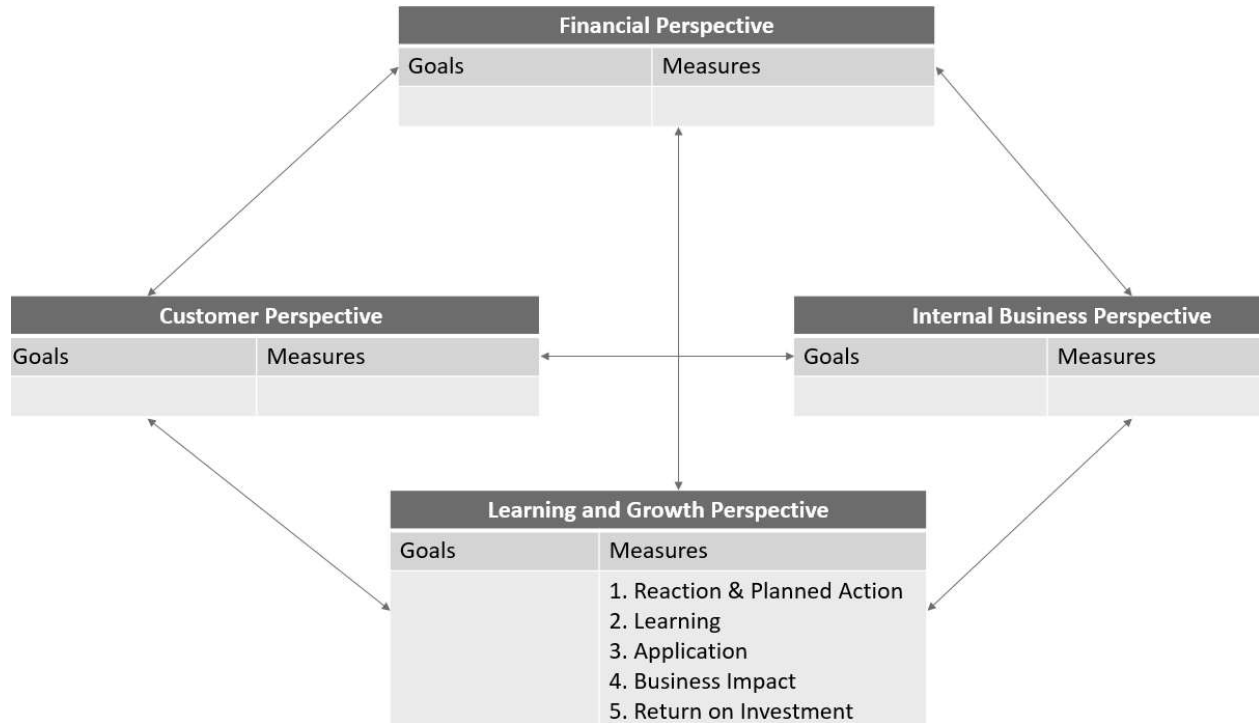


(Kaplan & Norton, 1992)

Even from a visual review, some of the criticisms of the balanced scorecard are observable. The lack of consistent measures is noted by the “blank slate” idea. While this offers flexibility to companies, it does little to ensure a consistent application and implementation are achieved. Additionally, linkages are possible in theory, but because the parameters are open to managers,

it can be difficult to make the linkages among the goals and perspectives work. In fact, the learning and growth perspective is not even linked to the financial perspective in the original description. Figure 2, below, illustrates how the Phillips' Model would fit into the balanced scorecard.

Figure 2: Balanced Scorecard with Phillips Learning Measures Integrated



By integrating Phillips' framework as the specific measures in the scorecard (specifically business impact and return on investment), very clear linkages among the perspectives are realized. Business impact of learning and growth could be easily envisioned from the customer, financial or internal business perspective. Application could additionally measure activities and goals easily linked to the other perspectives. Return on investment most directly indicates a direct linkage between the financial perspective and the learning and growth perspective, by identifying learning and growth goals as direct investments and thus measuring their return and validity. The integration of the Phillips Model serves as an anchor for the entire balanced scorecard, and solves issues of standardization, consistency and linkages among perspectives.

RECOMMENDATIONS FOR FURTHER RESEARCH

For a theoretical model such as this, the primary future research need is related to validation. The balanced scorecard approach is a model designed to assist in decision-making and decision-rationalizing, coordination and self-monitoring (Wiersma, 2009). To that end, future research should seek to test and validate the appropriateness of the Phillips Evaluation Model as a standardized component of the Balanced Scorecard process. Specific studies might include:

- A series of case studies that integrate Phillips' framework as the metric associated with the learning and growth perspective within organizations. The case studies should vary in terms of organization size, type, business model and location as a means of identifying strengths and weaknesses of scenarios in which this solution is optimal.
- Future research could compare the effectiveness of learning and growth objectives when using the Phillips Model as metrics, as opposed to highly individualized metrics developed by organizations.
- Prior research has called for rescaling the balanced scorecard when used for local government (Quinlivan, 2002). Future studies should determine the degree to which the Phillips' model, for purposes of usage with the balanced scorecard, requires considerations toward scale, and, if so, to what extent.
- Risinger (2018) used the balanced scorecard in order to develop strategic human capital management. Future research should investigate to what extent using the Phillips Model as a part of the balanced scorecard impacts human capital management.

CONCLUSION

The balanced scorecard attempts to answer four central questions for organizations, which include (1) how does the organization look to shareholders, (2) what must the organization excel at, (3) can the organization continue to improve and create value, and (4) how do customers see the organization? Future research can provide insights related to implementation of the Phillips Evaluation Model might provide best practice for organizations of different sizes, industries as well as within public and private sectors, including governmental. Impacts of using Phillips' model could lead to improved performance across all four perspectives within the traditional scorecard

approach. By integrating the Phillips Evaluation Model as the central measures used in the learning and growth perspective, the criticisms traditionally associated with the balanced scorecard can be largely offset to the extent that the entire organization can see improved performance and synergies from the use of this strategy.

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